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(54) **POWERED DOWN SELECTION OF A PREFERABLE WIRELESS COMMUNICATIONS SERVICE PROVIDER IN A MULTI-SERVICE PROVIDER ENVIRONMENT**

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(52) **U.S. Cl.** **455/434**; 455/62; 455/432; 455/455; 455/454

(58) **Field of Search** 455/403, 422, 455/426, 432, 434, 450, 454, 455, 509, 512, 513, 516, 517, 62

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(57) **ABSTRACT**

A powered down communication device locates a wireless service provider in a multi-service provider environment by examining frequency bands while powered down until a frequency band having an acceptable service provider is located. The frequency bands are examined in an order specified by a stored search schedule. An acceptable service provider is identified by comparing the identity of a service provider specified by an identifier received from a band being examined with a list of acceptable service providers. The communication device then registers with the acceptable service provider when powered up.

64 Claims, 6 Drawing Sheets

SID	FREQ	FREQ		FREQ	PROHIBIT
43	A	D	...	a	E
37	A	D	...	a	E
57	C	b	...	D	a
51	C	b	...	D	a
21	a	c	...	E	b
17	a	c	...	E	b
⋮	⋮	⋮		⋮	⋮

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TITLE: Powered down selection of a preferable wireless communications service provider in a multi-service provider environment

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Detailed Description Text - DETX (13):

The table of FIG. 10 may be programmed into memory 16 of the communication device by the device manufacturer, by the distributor or by the user via the keypad. It is also possible to program the table of FIG. 10 using over the air programming in a manner similar to that which was used for programming the search schedule of FIG. 8 or the prioritized table of service providers of FIG. 9. In some cases, there may not be a geographic identifier or SID in the table of FIG. 10 for a identifier that is received from a control channel to which the communication device is tuned. In this case, the communications device executes the search algorithms discussed earlier in an effort to locate a desirable service provider. When a desirable service provider has been located, the table of FIG. 10 is updated to list the previously unlisted geographic identifier and the frequency at which a desirable service provider is located.